

EUGENE CITY COUNCIL

AGENDA ITEM SUMMARY



Leadership in Energy and Environmental Design (LEED) Evaluation for City Buildings

Meeting Date: November 8, 2004
Department: Central Services
www.ci.eugene.or.us

Agenda Item Number: B
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ISSUE STATEMENT

The construction, operation and maintenance of City buildings create a range of environmental impacts. In order to implement the City Council policy on Sustainability Principles, the Facility Management Division is applying the U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED) criteria to the City's facilities. This work session provides the Council an overview of how the Division is using the LEED "Existing Building", or LEED-EB, criteria to evaluate the sustainability of General Fund buildings, and to develop strategies for improving their environmental performance.

BACKGROUND

In February, 2000, the Council adopted Resolution #4618, which called for City Departments to promote a sustainable future that meets today's needs without compromising the ability of future generations to meet their needs, and accept the responsibility to, among other conservation measures, minimize human impacts on local, regional and worldwide ecosystems.

One of the specific sustainable principles to be implemented is that the City will lead by example. The City of Eugene has an opportunity and responsibility to set an example for other organizations by operating its facilities and services in a sustainable manner. The City is committed to assessing its current practices and programs with respect to sustainability objectives. The City is also committed to implementing sustainable practices that address purchasing of products and services, maintenance, facility design, and municipal operations.

The LEED system applies the concepts of sustainability directly to our core mission: the ongoing operation and maintenance of the City's facilities. The LEED system is well-documented and based on the consensus of a large number of industry professionals. Using the LEED system enables the Division to concentrate on implementing the guidelines, rather than spending the effort to develop our own evaluation system. The comprehensiveness of the LEED systems allows us to expand from our current preventive maintenance and energy conservation approach to a much broader focus including site management, water use, characteristics of materials and indoor environmental quality. The broad focus of the system gives us a framework to help coordinate sustainability efforts across City departments.

The Council's 2003 – 2004 Vision and Goals Statement includes the goals of Sustainable Community Development and a Healthy Natural and Built Environment. The City's ability to operate and maintain buildings in a more sustainable way addresses both of these goals.

RELATED CITY POLICIES

The City's Environmental Policy, adopted in April, 2004, commits the City to reduce environmental impacts in all activities, including operations, maintenance, construction and waste disposal. Therefore, the City is committed to continually review all activities to identify and carry out cost-effective and achievable strategies to:

- prevent pollution
- reduce energy consumption and increase energy efficiency
- conserve water
- reduce consumption and waste
- reuse, recycle, and purchase recycled content products
- reduce reliance on non-renewable resources
- consider long-term as well as short-term environmental consequences when making planning, designing, engineering, purchasing, contracting, and budgeting decisions.

In 2002, Facility Management developed a draft sustainable building policy which can be viewed on the Division's web site. Subsequently, Facility Management expanded its green building program to include the sustainable operations and maintenance practices summarized in Attachment A. The 2002 draft policy is at:

http://www.ci.eugene.or.us/asd/facilities/Programs/Green_Bldgs/Sustainable_Bld.pdf

COUNCIL OPTIONS

This agenda item is informational only, and no Council action is being requested.

CITY MANAGER'S RECOMMENDATION

This agenda item is informational only, and no Council action is being requested

SUGGESTED MOTION

This agenda item is informational only, and no Council action is being requested

ATTACHMENTS

Attachment A: Summary of the Facility Management Division's current sustainable building operations and maintenance practices.

FOR MORE INFORMATION

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Summary of the Facility Management Division's Current Sustainable Building Operations and Maintenance Practices.

Green Building program consists of an integrated framework of design, construction, and operations practices that encompasses the environmental, economic, and social impacts of buildings. Green Building practices recognize the interdependence of the natural and built environments and seek to minimize the use of energy, water, and other natural resources and provide a healthy, productive indoor environment.

The Facility Management Division has been implementing sustainable practices in many areas over the past several years, beginning with the Division's energy conservation program in 1995. Prior to evaluating potential for applying the LEED "Existing Buildings", or "EB", criteria to the City's building inventory, the Division needed to establish a baseline of current sustainable practices. The Division began reviewing current sustainability efforts related to facilities in mid-2004. The following outline lists the efforts already underway. Both in Facility Management and elsewhere in the City, at the time the Division began the LEED-EB assessment:

Energy/Utilities

- Ongoing energy program has achieved 20%+ savings over 1995 baseline
- Monthly tracking of all utilities, including water and wastewater
 - Reveals operating changes, malfunction and billing errors
- Maximizing use of solar hot water at 2 of the City's 3 pools
- Involvement in remodels and new construction design
- Optimize use of controls systems
 - Holiday shutdowns
 - Night flush cooling

Materials

- Low VOC paints and finishes are standard
- Completed fluorescent lighting retrofits on 95% of our building area
- Tubular fluorescents lamps are low mercury
- All lighting products (including low mercury) are recycled
- Green seal approved cleaning and paper products used at most locations
- On-site paper, glass, metal and plastic recycling provided at most locations,
 - and in process of expanding to all sites
- Automatic dispensing system for custodial cleaning chemicals

Maintenance

- Proactive preventive maintenance program
 - Extends life of equipment
 - Saves energy by insuring the best operation of equipment
- Cold water, no detergents, run-off control used for exterior pressure wash
- Integrated pest management principles implemented
- Refrigerant use tracking system
- High efficiency equipment used when replacement is necessary

Computerized monitoring and balancing of pool chemicals
Custodial work scheduled to reduce driving between sites
Electric mini-trucks and leaf blowers reduce emissions
Use of native plantings in landscaping

Education

Northwest Energy Efficiency Council Building Operator Certification-
9 staff certified, 3 more in training resulting in
12 out of 16 applicable staff certified
Specialized technology and general staff training

Internal Efforts in Other Departments

24 Hybrid vehicles in fleet or on order
B20 biodiesel used in all diesel vehicles
Weather controlled irrigation
Integrated pest management in Parks
Wood products recycling
Salmon habitat protection
Wastewater waste methane used for electrical generation
LED stoplights and pedestrian controls (red and green)

The above listing verified that the City has already instituted a number of sustainable procedures. The goal of the Division's LEED-EB assessment is to learn how comprehensive these efforts are when benchmarked against the national standards of the LEED system.